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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,701	05/19/2005	Yasushi Takano	0033-1003PUS1	9238
2292 7590 11/21/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER RONESI, VICKEY M	
			ART UNIT 1796	PAPER NUMBER
			NOTIFICATION DATE 11/21/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

**Office Action Summary**

Application No.

10/535,701

Applicant(s)

TAKANO, YASUSHI

Examiner

Vickey Ronesi

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 September 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. All outstanding rejections are withdrawn in light of applicant's amendment filed on 9/19/2007.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. In light of applicant's arguments regarding particle size of the powder coating particle, new grounds of rejection are set forth below. Thus, *a 2<sup>nd</sup> non-final Office action is set forth as follows.*

#### *Claim Rejections - 35 USC § 112*

4. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, a bonding ratio of 100% is indefinite because it suggested that the flake present is not present. When the bonding ratio is 100%, there is 100% resin powder and 0% flake pigment.

With respect to claims 2-5, they are rejected for being dependent on a rejected claim.

#### *Claim Rejections - 35 USC § 103*

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al (US 5,824,144) in view of Morgan et al (US 5,319,001).

He et al discloses a powder coating composition which is applied by electrostatic coating (abstract), wherein the aluminum flake filler is adhered to the surface of the powder coating through a viscous layer (col. 3, lines 3-52). The exemplified relative amount of powder to pigment is 95% (col. 4, lines 36-37).

He et al fails to disclose the size of the powder coating particle with the aluminum flake adhered to the powder coating through a viscous layer.

Morgan et al discloses a powder coating composition and teaches that particles in the powder coating composition usually have a particle size of 15-75 microns so that the composition can be applied with an electrostatic spray (col. 1, lines 12-25).

Given that He et al discloses a powder coating which applied by electrostatic spray and further given that powder coating particles usually have a particle size of 15-75 microns to accommodate electrostatic spray as taught by Morgan, it would have been obvious to one of ordinary skill in the art to prepare a powder coating composition having a particle size of less than 100 microns from He et al.

6. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mikami et al (JP 52-128927, full English-language translation) in view of Morgan et al (US 5,319,001).

In working example 1 of Mikami et al (page 6, line 23 to page 8, line 12), a powder composition is disclosed comprising 100 parts aluminum flake (Aluminum Paste 4919M) that is coated with the monomer composition on page 6, lines 23-28 (amount of resin to aluminum powder is 17 g) and 1000 parts powder coating base, wherein resin solution (i.e., binder) is added to coagulate the pigment and powder coating base. Afterwards, the dried composition is

pulverized and passed through a sieve of 150 mesh (about 110 microns) and applied to a substrate via electrostatic deposition (page 8, line 3).

While Mikami et al teaches that the powder coating is passed through a sieve of 150 mesh (about 110 microns), it fails to disclose that the average particle size is at most 100 microns.

Morgan et al discloses a powder coating composition and teaches that particles in the powder coating composition usually have a particle size of 15-75 microns so that the composition can be applied with an electrostatic spray (col. 1, lines 12-25).

Given that Mikami et al discloses a powder coating which applied by electrostatic spray and further given that powder coating particles usually have a particle size of 15-75 microns to accommodate electrostatic spray as taught by Morgan, it would have been obvious to one of ordinary skill in the art to prepare a powder coating composition having a particle size of less than 100 microns from Mikami et al.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mikami et al (JP 52-128927, full English-language translation) in view of Morgan et al (US 5,319,001) and further in view of Symietz (US 4,507,421).

The discussion with respect to Mikami et al and Morgan et al in paragraph 6 above is incorporated here by reference.

Mikami et al fails to disclose the use of a terpene resin, however, it teaches that a variety of resins can be used on page 5, lines 1-6.

Symietz discloses a sealant composition and teaches known tackifying agents include those recited by Mikami et al and terpene resins (col. 2, lines 19-35).

Given that Mikami et al is open to any resin and further given the Symietz which teaches that well known tackifying resins include terpene resins, it would have been obvious to one of ordinary skill in the art to utilize a terpene resin in the resin solution of Mikami et al, absent a showing of unexpected or surprising results.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mikami et al (JP 52-128927, full English-language translation) in view of Morgan et al (US 5,319,001) and further in view of Sasaki et al (US 4,180,607).

The discussion with respect to Mikami et al and Morgan in paragraph 6 above is incorporated here by reference.

Mikami et al discloses a powder coating composition comprising a resin solution containing an organic solvent having a boiling point of 100°C or below (page 5, lines 8-9) which dissolves the resin but not the powder base paint (page 5, lines 21-22) and a resin having a glass transition temperature (i.e., softening temperature) of 50-100°C (page 4, lines 28-29).

Mikami et al does not explicitly disclose the molecular weight of the solution resin, however, note Example 5 (page 9, line 19 to page 35) which comprises mica and a resin solution containing Epicoat 1004 which has a molecular weight of 1400 as taught by Sasaki et al in col. 9, line 66 to col. 10, line 2.

Given that Mikami et al exemplifies a solution resin with a molecular weight of 1400 as taught by Sasaki et al, it would have been obvious to one of ordinary skill in the art to utilize a solution resin with the presently claimed molecular weight.

### ***Response to Arguments***

9. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number:  
10/535,701  
Art Unit: 1796

Page 7

11/13/2007  
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